

Proceedings of the Iowa Academy of Science

Volume 63 | Annual Issue

Article 57

1956

Forming Impressions of Personality: An Experimental Critique

Harry A. Grace
Grinnell College

Let us know how access to this document benefits you

Copyright ©1956 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Grace, Harry A. (1956) "Forming Impressions of Personality: An Experimental Critique," *Proceedings of the Iowa Academy of Science*, 63(1), 553-555.

Available at: <https://scholarworks.uni.edu/pias/vol63/iss1/57>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Forming Impressions of Personality: An Experimental Critique

By HARRY A. GRACE

Asch's recent text (2) emphasizes his experiment on the formation of impressions (1). Asch read seven words to two groups of subjects. The fourth word for Group A was *warm* and the fourth for Group B was *cold*. The order of the words for both groups was: intelligent, skillful, industrious, warm (cold), determined, practical, cautious. After the list had been read, subjects were instructed to choose the more appropriate word from each of 18 pairs of antonyms.

The percentage of agreement with the "positive" word of each pair of antonyms was determined for both groups. Groups A and B differed on ten pairs of words but not on the other eight. Asch claims that the results from the ten pairs which differ support his belief that a change in one of the seven stimulus words produces differential choices by the two groups of subjects.

Two conditions must be met in order to attribute differences between Groups A and B to subjects' perceptions. (a) Each of the seven stimulus words must be equally likely to arouse the 18 (or 10) positive response words. (b) Each of the positive response words must be independent of the stimulus words.

PROCEDURE

Two groups of undergraduate college students, numbering 70 and 59 each, served as subjects for the critical study of the adequacy of these two conditions. Subjects were told that they were taking a vocabulary test and given Asch's list of 18 pairs of antonyms. *Intelligent*, the first of the seven stimulus words, was then read aloud to the group, written on the blackboard and repeated orally every minute to maintain the set. Subjects were instructed to judge how strongly they associated *intelligent* with either word in each of the 18 pairs of words. Judgments were made on the following five-point scale:

Generous—much	more	about	more	much—Ungenerous
more		equal		more

After all subjects had judged *intelligent* for each of the 18 pairs of antonyms, the experimenter read *industrious*, the second word, etc. Thus, each of the seven stimulus words was judged by the subjects. For the Warm Group the fourth word was *warm*; for the Cold Group the fourth word was *cold*.

RESULTS

To arrive at a synonym score for the postive word in each of the 18 pairs, a value of 4 was given for a "much more" choice for the positive word, 3 for a "more" choice, 2 for "about equal," etc. The total score for each of the 18 positive words represented the degree to which it was synonymous with the stimulus word.

The 18 synonym scores for each stimulus word were then inter-correlated with the synonym scores for each of the other stimulus words within and between the Warm and Cold Groups. Pearson product-moment correlation coefficients are presented in Table 1.

Table 1
Pearson Product-moment Intercorrelation and Reliability
Coefficients for the Warm and Cold Groups

(The stimulus words are intelligent (I), skillful (S), industrious (U), warm (W) or cold (C), determined (D), practical (P), and cautious (K).)

Stimulus Words	Warm Group							Cold Group							Reliability Coefficient
	I	S	U	W	D	P	K	I	S	U	C	D	P	K	
I															
S	.50							.54							.94
U	.70	.16						.73	.02						.96
W or C	.42	.57	.63					.49	.51	.41					.96
D	.24	.19	.87	.42				.72	.74	.45					.92
P															.99
K															.92
															.98

Correlations between the seven stimulus words in the Warm and Cold Groups indicate *warm* and *cold* to be highly negatively correlated with each other and each of the remaining six stimulus words to be highly positively correlated with itself.

Table 2 presents the levels of significance of difference (3) between the synonym scores of the six stimulus words and *warm* or *cold*.

Table 2
Levels of Significance of Difference between the Synonym Scores of the Six Stimulus Words and Warm or Cold

Stimulus Words	List of 18 Pairs of antonyms		List of 10 Pairs of antonyms	
	Warm	Cold	Warm	Cold
Intelligent01	.02	.01
Skillful	.05	.01	.01	.01
Industrious01	.01	.01
Determined	.02	.01	.01	.01
Practical	.05	.01	.01	.01
Cautious	.01	.01	.01	.01

Intelligent and *industrious* do not differ significantly from warm in their synonymity with the 18 positive response words. Each of the other four stimulus words is significantly less synonymous with the 18 positive response words than is *warm*. All stimulus words are significantly more synonymous with the 18 positive words than is *cold*. When the ten positive response words which Asch selected as supporting his thesis are considered, each of them is significantly more synonymous with *warm* and antonymous with *cold* than with the other six stimulus words.

CONCLUSION

The results of the study support the following conclusions. (a) The Warm and Cold Groups are samples of the same population. (b) *Warm* and *cold* are antonyms. (c) The six stimulus words other than *warm* or *cold* are generally more synonymous with each other than with *warm*. Only *determined* and *cautious* are synonymous with *cold*. (d) *Warm* is generally more significantly synonymous and *cold* is always more significantly antonymous with the 18 positive response words than are the other six stimulus words. (e) *Warm* is always significantly more synonymous and *cold* more antonymous with the ten positive response words, on which the confirmation of Asch's conclusions rests, than are the other six stimulus words.

Therefore, the stimulus conditions were unequal. Each stimulus was not equally likely to arouse the 18 (or 10) positive response words. The responses were artifacts of the stimuli and do not necessarily represent the subjects' perceptions. The positive response words were not independent of the stimulus words.

In view of the experimental findings of this critique, there is no evidence from Asch's study that the change of one word significantly affects perception.

References

1. Asch, S. E. Forming impressions of personality. *J. abnorm. soc. Psychol.*, 1946, 41, 258-290.
2. Asch, S. E. *Social psychology*. New York: Prentice-Hall, 1952.
3. Wilcoxon, F. Some rapid approximate statistical procedures. New York: American Cyanamid Company, 1949.

GRINNELL COLLEGE
GRINNELL, IOWA